Atlantic Wood Industries, Inc

Fact Sheet: June 1995, Proposed Plan

EPA Issues Proposed Plan

On June 9, 1995, the U.S. Environmental Protection Agency (EPA) released its Proposed Remedial Action Plan (Proposed Plan) for the Atlantic Wood Industries Superfund Site, located in Portsmouth, VA. This Proposed Plan summarizes the results of recent environmental studies at the site. It also presents cleanup alternatives and describes EPA's recommended course of action for cleaning up the site.

Proposed Plan

As with many Superfund sites, the environmental problems at the Atlantic Wood Site are complex. As a result, site studies and cleanup have been organized into separate units. The Proposed Plan discussed in this fact sheet addresses the primary areas of soil, sediment, and Dense Non-Aqueous Phase Liquid (DNAPL) contamination at the site. DNAPLs are heavy liquids that exist beneath certain surface areas at the site. These liquids are related to creosote, which is a chemical used in the wood-treating industry. The potential cleanup of other areas (site impacts to groundwater and the Elizabeth River) will be studied separately. The site was divided into separate units because soils, sediments, and DNAPLs are a continuing source of environmental contamination. In addition, more investigation and studies are needed to determine proper clean- up actions for groundwater and the River.

EPA seeks your comments and questions on the Proposed Plan during the public comment period and at the public meeting (see box below). EPA encourages your participation and welcomes your input. The complete Proposed Plan, along with technical documents relating to the site investigations and studies, can be found in the public information files listed on page 3. Unlike the Proposed Plan, this fact sheet is not a legal or technical document. This fact sheet reviews the information in the Proposed Plan, outlines EPA's recommended actions, reviews the site history, and tells you how to get further site-related information. All bold underlined words are defined in the glossary inserted in this fact sheet.

Public Comment Period

EPA encourages community members to review and comment on EPA's Proposed Plan for the Atlantic Wood Site. Interested parties may submit their comments or questions to EPA during the public comment period, which runs from June 9, 1995 to July 8, 1995. EPA will review all comments before selecting a final clean-up method. Comments should be mailed to:

David Iacono (3HW41)
Remedial Project Manager
U.S. EPA Region III
1650 Arch St.
Philadelphia, PA 19103-2029

** Please make sure your comments/questions are postmarked by July 8, 1995.*

Public Meeting

EPA will hold a public meeting to discuss the Proposed Plan. Officials from EPA will be on hand to present information and answer any site-related questions or comments. A transcript of the meeting will be taken and made part of the official record for the site. All interested parties are invited to attend the public meeting. The meeting date, time, and location are:

Tuesday, June 27, 1995
7:00 p.m.

Cradock Community Center
45 Afton Parkway
Portsmouth, Virginia

Site Contamination

A Remedial Investigation was conducted at the site to determine the nature and extent of contamination. Soils, sediments, and groundwater were sampled and analyzed. In order to better evaluate clean-up actions, the site was divided into the five distinct Units described in the box below.

- Unit 1: On-site Soils in the former Wood Treatment East Area, Wood Treatment West Area, Historic Disposal Area, and Wood Storage Area
- Unit 2: On-site Sediments in the Inlet Area, Storm Water Runoff Ditch, and Western Runoff Ditch
- Unit 3: Dense Non-Aqueous Phase Liquids (DNAPLs)
- Unit 4: On-site Sediments in the Southeast Ditch
- Unit 5: On-site Soils in the Waste Lime Area

Soil samples revealed polynuclear aromatic hydrocarbons (PAHs), pentachlorophenol (PCP), and metals such as arsenic, copper and zinc. PAHs (compounds related to creosote) and PCP were used in the wood-treating process at the site. Several groundwater samples in the upper aquifer revealed the presence of DNAPLs. Aquifers are areas below the surface of the ground that hold and transport groundwater.

In addition to the Remedial Investigation, a Risk Assessment was conducted for the site. The Risk Assessment evaluated the potential risks posed by site contamination. The evaluation concluded that the site, in its present condition, poses a potential threat to human health and the environment.

A Feasibility Study was also conducted to evaluate the available technologies to clean up site soils, sediments, and DNAPLs. For soils and sediments, two general categories were evaluated. One category deals with treatment alternatives, and the other category deals with disposal-only alternatives. For DNAPLs, various recovery technologies were evaluated. All clean-up alternatives include surface water, groundwater, and sediment monitoring; deed restrictions; erosion controls; dust controls; and treatability studies. The alternatives EPA evaluated are listed in the table below and are numbered to correspond with the Proposed Plan.

EPA's Preferred Alternatives

After carefully reviewing all the alternatives, EPA has chosen a recommended course of action for each Unit. EPA evaluated each alternative against several criteria before choosing the preferred alternatives. (See box in right hand column for EPA's list of criteria.) The preferred alternative for each Unit is summarized below.

UNITS 1 & 2

On-site Soils and On-site Sediments - Alternative 7: Excavation, Engineered Land Treatment, and Backfill

This alternative involves excavating and biologically treating approximately 20,000 cubic yards of soil, and 564 cubic yards of sediments. The soils and sediments would be placed in an on-site treatment plot and mixed with nutrients and water which would help microorganisms break down the contaminants. Once the required clean-up levels are achieved, the soil and sediments would be returned to the general area from which they were excavated. If the required clean-up levels are not achieved, a back-up plan would be implemented. (See the Proposed Plan for details.)

UNIT 3

DNAPLs - Alternative 11: Extracting DNAPL for Reuse

This alternative calls for the installation of new recovery wells and the use of existing wells for the purpose of pumping or bailing out DNAPLs from the underground areas. This alternative would reduce the concentrations of DNAPLs underground and in the groundwater.

UNITS 4 & 5

Southeast Ditch Sediments and Waste Lime Area Soils- Alternative 3: Excavation and Off-site Landfill

This alternative involves excavating an estimated 250 cubic yards of sediments and 2,370 cubic yards of soils and transporting them to a regulated off-site landfill for disposal. Following excavation, the areas would be backfilled with clean soil and graded to control drainage.

EPA's preferred alternatives are only recommendations at this time. EPA welcomes community input on all of the alternatives during the public comment period. Based on input received, EPA may change its preferred clean-up alternatives. (See Public Comment Period on Page 1.)

EPA's Evaluation Criteria

- Overall protection of human health and the environment
- Compliance with applicable or relevant and appropriate requirements (ARARs)
- Long-term effectiveness
- Reduction of toxicity, mobility, or volume of contaminants
- Short-term effectiveness
- Implementability
- Cost
- State acceptance
- Community acceptance (Public Comment Period)

Information Repositories

EPA's public information files for the Atlantic Wood Site contain the technical and legal documents that EPA bases its site-related decisions upon. These files, known as the Administrative Record, include the complete Proposed Plan and other site documents used to select a clean-up method. EPA encourages community members to review and photocopy the information in the Administrative Record. The contents of the repositories are the same at each of the following locations:

Portsmouth Municipal Library
601 Court Street
Portsmouth, VA 23704
(804) 393-8501

Kirn Memorial Library
City Hall Avenue
Norfolk, VA 23501
(804) 441-2579

Chesapeake Public Library
298 Cedar Road
Chesapeake, VA 23320
(804) 547-6592

EPA Contact

Vance Evans is EPA's Community Involvement Coordinator for the site. He can be reached at the address or telephone numbers listed below. When calling EPA's (800) number, be sure to identify the site name and ask for Vance.

Vance Evans (3EA30)
Community Involvement Coordinator
U.S. EPA Region III
1650 Arch St.
Philadelphia, PA 19103-2029
(800) 553-2509 or (215) 814-5526
evans.vance@epa.gov

Site Background

The 47.5-acre Atlantic Wood Industries Superfund Site is located on the industrialized banks of the South Branch of the Elizabeth River in Portsmouth, Virginia. The site operated as a wood-treating facility from 1926 to 1992. Chemical compounds that were used in the treatment operations such as polynuclear aromatic hydrocarbons (PAHs) and pentachlorophenol (PCPs), have contaminated soils, sediments and groundwater at the site.

Based on environmental investigations of the site, EPA determined that the site posed a potential threat to human health and the environment, and therefore placed the site on EPA's Superfund National Priorities List on February 15, 1990. Under EPA oversight and in consultation with the Virginia Department of Environmental Quality, Atlantic Wood Industries conducted a Remedial Investigation and Feasibility Study of the site. Atlantic Wood Industries has also conducted initial clean-up actions at the site whereby a leaking storm sewer was re-lined to prevent the spread of subsurface contamination to an adjacent inlet. Also, approximately 520 cubic yards of heavily contaminated inlet sediments were removed and replaced with clean fill.

Glossary of Terms

Aquifer

> An underground formation composed of sand, soil, or rock that holds and transports groundwater to wells and springs.

Arsenic

A heavy metal used as an alloying agent that, at high exposure levels, can be carcinogenic (cancer-causing).

Copper

A common metal widely used in industrial manufacturing. Extended exposure to copper dust or fumes can cause skin and eye irritations, fever, illness, and liver damage.

Creosote

A dark oily liquid having a penetrating tarry odor, obtained by the distillation of wood tar and commonly used as a wood-treating preservative.

Dense Non-Aqueous Phase Liquids (DNAPLs)

A chemical compound which is heavier than water and not readily dissolvable in water.

National Priorities List (NPL)

EPA's list of the nation's top-priority hazardous waste sites that are eligible for federal money to be cleaned up under Superfund.

Pentachlorophenol (PCP)

n organic compound commonly used as a wood preservative. High exposure to PCP can result in bronchitis, skin rashes, birth defects, and kidney and liver damage.

Polynuclear Aromatic Hydrocarbons (PAHs)

A class of organic compounds, originating from creosote, commonly used as a wood preservative.

Proposed Remedial Action Plan (Proposed Plan)

A Superfund document which reviews various clean-up alternatives presented in the site Feasibility Study and highlights EPA's recommended course of action.

Public Comment Period

A period of no less than thirty days during which the public can review and comment on various documents and EPA recommended actions.

Remedial Investigation/Feasibility Study (RI/FS)

Two distinct but related studies conducted as part of the Superfund process. The RI identifies the nature and extent of contamination at a site and the FS identifies and evaluates possible ways contamination can be addressed.

Risk Assessment

A means of estimating the amount of risk posed by a Superfund site to human health or the environment. The objectives of a Risk Assessment: help determine the need for clean-up actions; help determine the levels of chemicals that can remain at a site and be protective of human health or the environment; and provide a basis for comparing different clean-up methods.

Sediments

Soil, sand, and minerals washed from land into water. Sediments tend to pile up in reservoirs, inlets, rivers, and harbors.

Superfund

Common name for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Enacted by Congress in 1980, Superfund gives EPA the authority to stop releases or potential releases of hazardous substances. It also provides funding for cleanups when money from responsible parties cannot be recovered.

Zinc

A soft metal commonly used as a coating on iron and steel, manufacturing metal alloys, and as a dust in making paints and dyes. Exposure to zinc dust can cause skin and eye irritation along with severe cough and chest irritation.

Technical Assistance Grant

EPA provides Technical Assistance Grants (TAGs) of up to $50,000 as part of its Superfund community relations program. The Technical Assistance Grant program enables citizens in a site area to hire a technical expert to review and interpret site reports generated by EPA or other parties. Complete information on Technical Assistance Grants is contained in an EPA document titled The Citizens' Guidance Manual for the Technical Assistance Grant Program, which is made available with all site information at the local information repository listed on page 3. For additional information on how to apply for a Technical Assistance Grant, contact:

Vance Evans (3EA30)
Community Involvement Facilitator
U.S. EPA Region III
1650 Arch St.
Philadelphia, PA 19103-2029
(215) 814-5526 or (800) 553-2509
Evans.Vance@epa.gov

EPA accepts applications for Technical Assistance Grants as required by the Comprehensive Environmental Response, Compensation, and Liability Act. Only one group per site can receive a Technical Assistance Grant, so EPA urges local groups to join together to apply.